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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/994,013	11/27/2001	Yoshiyuki Tsuda	216585US2RD	1105
22850	7590	05/24/2006	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			PWU, JEFFREY C	
			ART UNIT	PAPER NUMBER
			2143	

DATE MAILED: 05/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/994,013

Applicant(s)

TSUDA, YOSHIYUKI

Examiner

Jeffrey C. Pwu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/05/04</u> | 6) <input type="checkbox"/> Other: ____ |

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DETAILED ACTION

Title

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims rejected under 35 U.S.C. 102(e) as being anticipated by Tummala et al. (U.S. 6,915,345).

Tummala et al. teaches claims :

1. A mobile communication system, comprising:

a mobile node device according to Mobile IP protocol; (col.3, line 35-col.4, line 43)

an AAAH server device according to a prescribed AAA protocol which is provided at a home network of the mobile node device, for supporting an authentication and accounting service with respect to packet communications by the mobile node device; (310)

the mobile node device having a transmission unit configured to transmit an authentication and accounting request for requesting a desired accounting service at the AAAH server device; and the AAAH server device having: an information recording unit configured to

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record communication fee information regarding a communication fee to be charged to a user of the mobile node device; and (“AAA server will also provide the accounting function including tracking usage and charges for use of transmissions links between administrative domains.”)

a processing unit configured to carry out authentication and accounting processes for the packet communications by the mobile node device according to the communication fee information, and a processing for providing the desired accounting service according to the authentication and accounting request which is received from the mobile node device when it is judged that authentication succeeded according to authentication information contained in the authentication and accounting request. (1010, 1012, 1022)

2. The mobile communication system of claim 1, wherein the processing unit of the AAAH server device is operated such that, when the desired accounting service is a processing for transferring a charged amount to be paid to another party by the user of the mobile node device to the communication fee of the user of the mobile node device, the communication fee information is recorded in the information recording unit according to the charged amount. (col.5, line 34-col.6, line 11)

3. The mobile communication system of claim 2, wherein the processing unit also carries out a procedure for paying the charged amount to said another party when the desired accounting service is a payment of the charged amount to said another party. (Broker AAA Servers; col.9, line 66-col.10, line 36)

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4. The mobile communication system of claim 2, wherein the processing unit of the AAAH server device is operated such that, when the desired accounting service is the processing for transferring the charged amount to be paid to said another party by the user of the mobile node device to the communication fee of the user of the mobile node device, the processing unit notifies information regarding the authentication and accounting request from the mobile node device to another AAA server device for supporting the authentication and accounting service with respect to a mobile node of said another party. (accounting servers)

5. The mobile communication system of claim 2, wherein the processing unit of the AAAH server device is operated such that, when the desired accounting service is acquisition of a charged amount information regarding the charged amount to be paid to said another party by the user of the mobile node device, the processing unit acquires the charged amount information from a device providing the charged amount information and transfers the charged amount information to the mobile node device. ("AAA servers on the home and foreign network will perform the AAA activities. Security concerns arise in the mobile communications systems with multiple administrative domains because authorized users are subject to the following forms of attack: (1) session stealing where a hostile node hijacks the network session from mobile node by redirecting information packets, (2) spoofing where the identity of an authorized user is utilized in an unauthorized manner to obtain access to the network, and (3) eavesdropping and stealing of information during a session with an authorized user. Authentication is the process of proving someone's claimed identity, and security systems on a mobile IP network will often require authentication of the system user's identity before authorizing a requested activity. The AAA

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server authenticates the identity of an authorized user, and authorizes the Mobile Node's requested activity. Additionally, the AAA server will also provide the accounting function including tracking usage and charges for use of transmissions links between administrative domains.”)

6. The mobile communication system of claim 1, further comprising: an AAAF server device according to the prescribed AAA protocol which is provided at a visited network of the mobile node device, for supporting the authentication and accounting service with respect to packet communications by the mobile node device, the AAAF server device (340) having a transmission unit configured to transmit another authentication and accounting request for requesting an accounting (349) with respect to the packet communications by the mobile node device that has moved to the visited network; wherein the processing unit of the AAAH server device is operated such that, when said another authentication and accounting request is received from the AAAF server device and it is judged that authentication succeeded according to an authentication information contained in said another authentication and accounting request, the communication fee information is recorded in the information recording unit according to information regarding the accounting contained in said another authentication and accounting request. (col.5, line 34-col. 7, line 4)

7. A mobile node device according to Mobile IP protocol, comprising: a Mobile IP processing unit configured to carry out a procedure for receiving a packet transfer service according to the Mobile IP by a home agent device provided at a home network of the mobile node device and a

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foreign agent device provided at a visited network of the mobile node device; and an AAA processing unit configured to carry out a procedure for receiving a desired accounting service, with respect to an AAAH server device according to a prescribed AAA protocol which is provided at the home network for managing information regarding a communication fee of the mobile node device, while receiving the packet transfer service at the Mobile IP processing unit. (claim 7 is similarly rejected as in claim 1)

8. The mobile node device of claim 7, wherein the AAA processing unit carries out a procedure for requesting transfer of a charged amount to be paid to another party by a user of the mobile node device to the communication fee of the user of the mobile node device. (col.5, line 34-col.6, line 11)

9. The mobile node device of claim 8, wherein the processing unit carries out a procedure for requesting payment of the charged amount to said another party. (375)

10. The mobile node device of claim 8, wherein the processing unit carries out a procedure for requesting acquisition of a charged amount information regarding the charged amount to be paid to said another party by the user of the mobile node device. (claim 10 is similarly rejected as in claims 1-6)

11. An AAAH server device according to a prescribed AAA protocol which is provided at a home network of a mobile node device according to Mobile IP protocol in a mobile

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communication system, for supporting an authentication and accounting service with respect to packet communications by the mobile node device, the AAAH server device comprising: an information recording unit configured to record communication fee information regarding a communication fee to be charged to a user of the mobile node device; and a processing unit configured to carry out authentication and accounting processes for the packet communications by the mobile node device according to the communication fee information, and a procedure for providing a desired accounting service according to an authentication and accounting request which is received from the mobile node device when it is judged that authentication succeeded according to authentication information contained in the authentication and accounting request. (claim 11 is similarly rejected as in claim 1)

12. The AAAH server device of claim 11, wherein the processing unit is operated such that, when the desired accounting service is a processing for transferring a charged amount to be paid to another party by the user of the mobile node device to the communication fee of the user of the mobile node device, the communication fee information is recorded in the information recording unit according to the charged amount. (claim 12 is similarly rejected as in claims 1-6)

13. The AAAH server device of claim 12, wherein the processing unit also carries out a procedure for paying the charged amount to said another party when the desired accounting service is a payment of the charged amount to said another party. (claim 13 is similarly rejected as in claims 1-6)

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14. The AAAH server device of claim 12, wherein the processing unit is operated such that, when the desired accounting service is the processing for transferring the charged amount to be paid to said another party by the user of the mobile node device to the communication fee of the user of the mobile node device, the processing unit notifies information regarding the authentication and accounting request from the mobile node device to another AAA server device for supporting the authentication and accounting service with respect to a mobile node of said another party. (claim 14 is similarly rejected as in claims 1-6)

15. The AAAH server device of claim 12, wherein the processing unit is operated such that, when the desired accounting service is acquisition of a charged amount information regarding the charged amount to be paid to said another party by the user of the mobile node device, the processing unit acquires the charged amount information from a device providing the charged amount information and transfers the charged amount information to the mobile node device. (claim 15 is similarly rejected as in claims 1-6)

16. The AAAH server device of claim 11, wherein the mobile communication system has an AAAF server device according to the prescribed AAA protocol which is provided at a visited network of the mobile node device, for supporting the authentication and accounting service with respect to packet communications by the mobile node device and transmitting another authentication and accounting request for requesting an accounting with respect to the packet communications by the mobile node device that has moved to the visited network; and the processing unit is operated such that, when said another authentication and accounting request is

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received from the AAAF server device and it is judged that authentication succeeded according to an authentication information contained in said another authentication and accounting request, the communication fee information is recorded in the information recording unit according to information regarding accounting contained in said another authentication and accounting request. (claim 16 is similarly rejected as in claims 1-6)

17. A method for receiving an authentication and accounting service at a mobile node device according to Mobile IP protocol, the method comprising: carrying out a procedure for receiving a packet transfer service according to the Mobile IP by a home agent device provided at a home network of the mobile node device and a foreign agent device provided at a visited network of the mobile node device; and carrying out a procedure for receiving a service of a desired accounting service, with respect to an AAAH server device according to a prescribed AAA protocol which is provided at the home network for managing information regarding a communication fee of the mobile node device, while receiving the packet transfer service. (claim 17 is similarly rejected as in claim 1)

18. A method for providing an authentication and accounting service at an AAAH server device according to a prescribed AAA protocol which is provided at a home network of a mobile node device according to Mobile IP protocol in a mobile communication system, for supporting an authentication and accounting service with respect to packet communications by the mobile node device, the method comprising: recording communication fee information regarding a communication fee to be charged to a user of the mobile node device; and carrying out

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authentication and accounting processes for the packet communications by the mobile node device according to the communication fee information, and a procedure for providing a desired accounting service according to an authentication and accounting request which is received from the mobile node device when it is judged that authentication succeeded according to authentication information contained in the authentication and accounting request. (claim 18 is similarly rejected as in claim 1)

19. A method for providing a mobile node device information, comprising: notifying information indicating a state of a mobile node device according to Mobile IP protocol from a prescribed server device which detected the state of the mobile node device to a WWW server device for providing information of the mobile node device; and updating a display format of a prescribed display content corresponding to the mobile node device to a new display format corresponding to a notified state at a WWW page (335) corresponding to the mobile node device provided by the WWW server device upon receiving the information indicating the state of the mobile node device. (claim 10 is similarly rejected as in claim 1)

20. A method for confirming a correspondent terminal, comprising: transmitting a confirmation request from a first terminal device to a second terminal device which is a mobile node device according to Mobile IP protocol, before carrying out a call setup procedure from the first terminal device with respect to the second terminal device, the confirmation request containing an identification information including a host name or a set of a host name and a user name of the second terminal device as recognized by the first terminal device; comparing the

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identification information contained in the confirmation request with an actual identification information including an actual host name or a set of an actual host name and an actual user name of the second terminal device, at the second terminal device upon receiving the confirmation request, and returning an affirmative response when the identification information contained in the confirmation request coincides with the actual identification information of the second terminal device or a negative response when the identification information contained in the confirmation request does not coincide with the actual identification information of the second terminal device, from the second terminal device to the first terminal device; and carrying out the call setup procedure from the first terminal device with respect to the second terminal device when the affirmative response from the second terminal device is received at the first terminal device. ("Broker AAA Servers Establishing multiple SLAs among multiple service providers and networks increases the management complexity of the system. In order to reduce this management complexity and allow large-scale roaming among different networks, Broker AAA Servers can be established to provide a common support platform for multiple SLAs. The Broker AAA Server essentially becomes a consortium of SLAs from various networks, and Mobile Nodes need only have a relationship with a single SLA maintained by an Broker AAA Server to acquire indirect access to other SLAs through the reciprocal agreements with other SLAs maintained by the Broker AAA Server (and indirectly other Broker AAA Servers). By allowing access to all SLAs in a network, the Mobile Node can roam throughout the networks without having to establish independent relationships with the other SLAs. In FIG. 4, the home network 310 supports a secure messaging gateway 315 having an AAA server 317 and firewall 319. The secure messaging gateway 315 is coupled to the home network common buss line 320

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via communication link 322. The home network 310 has a home agent 328 that is coupled to the home network communication buss 320 via communication link 324. The home network 310 is coupled to the public Internet 335 via communication link 330. The foreign network 340 supports a secure messaging gateway 345 having an AAA server 349 and firewall 347. The secure messaging gateway 345 is coupled to the home network common buss line 350 via communication link 352. The foreign network 340 has a foreign agent 358 that is coupled to the foreign network communication buss 350 via communication link 354. The foreign network 340 is coupled to the public Internet 335 via communication link 337. The Mobile Node 364 communicates with the network via the cellular transceiver 360 (or any other type of Access Network coupled to the foreign network 340), which is coupled to the Foreign Agent 358 via communication link 362. After moving to the foreign network 340 or upon power-up at that network and under the condition that no SLA exists between the foreign network 340 and the home network 310, the Mobile Node 364 will first send a registration request message to the Foreign Agent 358. The registration request and response may be sent initially in the clear to establish the relationship, but the registration request and response must be re-established later in a secure connection. In order to establish this secure connection, the Foreign Agent 358 forwards the registration request to the foreign AAA server 349, and the AAA server 349 looks at the address of the mobile node 364 from the registration request to confirm whether an SLA exists between the home network 310 and the foreign network 340. Thereafter, any registration requests and responses are established using the secure connection established initially according to the procedure described above. After confirming that no SLA exists between the home network 310 and foreign network 340, the AAA server 349 consults with the Broker AAA

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Server 375 in communication 380. The communication 380 includes a Domain Discovery Request (DDR) message which requests the Broker AAA Server for the identification of the target domain system. If the Broker AAA Server 375 is associated with the home network 310, the Broker AAA Server 375 sends a response 385 to the AAA server 349. The response 385 includes a Domain Discovery Answer (DDA) message that has a security mechanism generated to establish the SLA between the foreign and home networks.”)

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey C. Pwu whose telephone number is 571-272-6798. If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, David Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



5/19/06